Listing of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1-2 (**Canceled**)

Claim 3 (**Previously Presented**) The method of Claim 9 or 10, wherein the host cell is a prokaryotic cell or an eukaryotic cell.

Claim 4 (**Previously Presented**) The method of Claim 3, wherein the host cell is a microorganism.

Claim 5 (**Previously Presented**) The method of Claim 4, wherein the microorganism is *Escherichia coli*.

Claim 6 (**Currently Amended**) The method of Claim 9 or Claim 10, wherein the molecular weight of the polypeptide comprising a serine residue is about 1000 to 20000 daltons.

Claim 7 (**Canceled**)

Claim 8 (**Previously Presented**) The method of Claim 9 or Claim 10, wherein the atrial natriuretic peptide is human atrial natriuretic peptide.

Claim 9 (**Currently Amended**) A method for reducing formation of a byproduct polypeptide comprising an O-acetylserine residue in place of a serine residue in the atrial natriuretic peptide, comprising:

(i) culturing, in a medium, transformed host cells that produce a recombinant atrial natriuretic peptide comprising a serine residue and a byproduct polypeptide comprising an O-acetylserine residue in place of a serine residue;

(ii) adding at least 3 g/L methionine and at least one of at least 3 g/L histidine or at least 3 g/L glycine to the medium ~~in an amount effective to reduce said byproduct formation~~; and

(iii) reducing the formation of said byproduct polypeptide,

wherein the formation of said byproduct polypeptide is reduced in an amount greater than or equal to 50% as compared to a control medium with no methionine, histidine, or glycine added.

Claim 10 (**Currently Amended**) A method for producing a polypeptide comprising a serine residue comprising:

(i) culturing, in a medium, transformed host cells that produce a recombinant atrial natriuretic peptide comprising a serine residue and a byproduct polypeptide comprising an O-acetylserine residue in place of a serine residue in the atrial natriuretic peptide;

(ii) adding at least 3 g/L methionine and at least one of at least 3 g/L histidine or at least 3 g/L glycine to the medium ~~in an amount effective to reduce said byproduct formation~~; and

(iii) reducing the formation of said byproduct polypeptide,

wherein the formation of said byproduct polypeptide is reduced in an amount greater than or equal to 50% as compared to a control medium with no methionine, histidine, or glycine added.

Claims 11-16 (**Canceled**)

Claim 17 (**Currently Amended**) A method for reducing formation of a byproduct polypeptide comprising an O-acetylserine residue in place of a serine residue in the atrial natriuretic peptide, comprising:

(i) culturing, in a medium, transformed host cells that produce a recombinant atrial natriuretic peptide comprising a serine residue and a byproduct polypeptide comprising an O-acetylserine residue in place of a serine residue;

(ii) adding to said medium at least one of at least 3 g/L histidine or at least 3 g/L glycine to the medium ~~in an amount effective to reduce said byproduct formation~~; and

(iii) reducing the formation of said byproduct polypeptide,

wherein the formation of said byproduct polypeptide is reduced in an amount greater than or equal to 50% as compared to a control medium with no histidine or glycine added.

Claim 18 (**Currently Amended**) A method for producing a polypeptide comprising a serine residue comprising:

(i) culturing, in a medium, transformed host cells that produce a recombinant atrial natriuretic peptide comprising a serine residue and a byproduct polypeptide comprising an O-acetylserine residue in place of a serine residue in the atrial natriuretic peptide;

(ii) adding at least one of at least 3 g/L histidine or at least 3 g/L glycine to the medium ~~in an amount effective to reduce said byproduct formation~~; and

(iii) reducing the formation of said byproduct polypeptide,

wherein the formation of said byproduct polypeptide is reduced in an amount greater than or equal to 50% as compared to a control medium with no histidine or glycine added.

Claims 19-20 (**Canceled**)

Claim 21 (**Previously Presented**) The method of Claim 17, wherein the host cell is a prokaryotic cell or an eukaryotic cell.

Claim 22 (**Previously Presented**) The method of Claim 21, wherein the host cell is a microorganism.

Claim 23 (**Previously Presented**) The method of Claim 22, wherein the microorganism is *Escherichia coli.*

Claim 24 (**Currently Amended**) The method of Claim 17, wherein the molecular weight of the polypeptide comprising a serine residue is about 1000 to 20000 daltons.

Claim 25 (**Previously Presented**) The method of Claim 17, wherein the atrial natriuretic peptide is human atrial natriuretic peptide.

Claim 26 (**Previously Presented**) The method of Claim 17, further comprising adding an the amount of methionine effective to reduce formation of a byproduct polypeptide wherein said amount is 3 g/L.

Claim 27 (**Previously Presented**) The method of Claim 18, wherein the host cell is a prokaryotic cell or an eukaryotic cell.

Claim 28 (**Previously Presented**) The method of Claim 27, wherein the host cell is a microorganism.

Claim 29 (**Previously Presented**) The method of Claim 28, wherein the microorganism is *Escherichia coli.*

Claim 30 (**Currently Amended**) The method of Claim 18, wherein the molecular weight of the polypeptide comprising a serine residue is about 1000 to 20000 daltons.

Claim 31 (**Previously Presented**) The method of Claim 18, wherein the atrial natriuretic peptide is human atrial natriuretic peptide.

Claim 32 (**Previously Presented**) The method of Claim 18, further comprising adding an the amount of methionine effective to reduce formation of a byproduct polypeptide wherein said amount is 3 g/L.

Claims 33-36 (**Canceled**)